

## REMARKS

Claims 1, 2, 4, 5-9, 12, 14-16, 18-25 are currently pending in the present application. Previously added independent claims 21-25 should be in allowable format. Claims 1, 8 and 15 have been amended to incorporate allowable subject based on independent claims 21-25.

### Allowable Subject Matter

In the final office action, the Examiner indicated that claims 3, 10, 11, 13, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the rejected base claim and any intervening claims. In response to the final office action, Applicants added the allowable subject matter of claims 3, 10, 11, 13 and 17 rewritten in independent form as new claims 21 through 25.

### Claims 1, 2, 4, 5-9, 12, 14-16, 18-25

Independent claim 1 recites method that includes changing filtering characteristics on a main signal path as a function of at least one amplitude on a second signal path coupled to the main signal path. The main signal path and the second signal path have a frequency band of operation. The amplitude includes **an upper edge amplitude and a lower edge amplitude in an adjacent band relative to the frequency band of operation**. The above bolded feature has also been added to independent claims 8 and 15. The bolded feature is similar to the language in each of the allowable claims 21-25. Applicants respectfully submit that claims 1, 8, 15 and respective dependent claims should be allowable for at least the same reasons as allowable claims 21-25.

In addition, Vogt et al. fails to teach or suggest the above bolded features of claim 1. Vogt et al. is directed to a method of adjusting bandwidth in a mobile radio receiver to an optimum level by continuously comparing a **first signal level**, upstream of a bandpass filter to a **second signal level** downstream of the bandpass filter, to derive a difference value representative of adjacent-channel interference. Vogt et al. then uses an electronically controlled selector switch to select a one of a series of filters (14<sub>1-N</sub>) whose

bandwidth is sufficiently narrow to cut out the interfering broadcast signal. The method of Vogt thereby takes signal level measurements both upstream and downstream of one of a series of bandpass filters ( $14_{1-N}$ ) along a single signal path in which the bandpass filter resides. The signal path chosen during operation is variable and is selectively controlled by a comparison circuit (13), which positions selectors  $S_1$  and  $S_2$  in complimentary fashion so that they respectively connect to the input and output of one of the available bandpass filters selected by the comparison circuit (13) (See Vogt, column 2, lines 49-59). Thus, **first and second signal levels** connected to the input and output of a bandpass filter is integral to the operation of the invention disclosed in Vogt.

In contrast to the method disclosed in Vogt, the present invention changes filter characteristics based on an **upper edge amplitude and a lower edge amplitude** in an adjacent band relative to the frequency band of operation. In the present invention a received signal is received along a main signal path (40). A coupler (42) provides a replica of the RF analog signals that exist on main signal path 40 to a band edge detection path (18) which routes the replicated signal to band edge detection circuitry (20). A splitter 48 divides the RF signals on the band edge detection path 18 and provides a replica of the signal on an upper band edge detection path 50 and a lower edge detection path 52. Each path includes respective power detectors 60, 70 and filters 62, 72 for providing power levels of the band edges. Thus, in one embodiment, the processing circuit 20 receives signals indicating or representing the power levels of the upper and lower band edge bandwidths.

In this manner, the present invention provides power levels of **the upper and lower band edge** bandwidths in its determination of the appropriate filter characteristics to apply. This method is clearly recited in claims 1, 8, and 15 and is not taught by Vogt. Vogt clearly relies on measurements taken by comparing signals upstream and downstream of a filter placed in that path, to determine whether an adjustment in filtering characteristics should be made. The present invention, in contrast, evaluates the upper and lower edges of the signal for measurement of interference and accordingly modifies a variable filter in the main signal path. Accordingly, Vogt et al. does not anticipate claims 1, 8 and 15 of the present invention and these claims are allowable for at least these reasons.

With respect to dependent claims 2, 4, 5-7, 9, 12, 14, 16, 18-20, Applicants respectfully assert that these dependent claims are not anticipated by Vogt et al. for at least the same reasons discussed above with respect to claims 1, 8 and 15. Accordingly, Applicants contend that claims 1, 2, 4, 5-9, 12, 14-16, 18-25 are not anticipated by Vogt and should be allowed.

**Request for Continued Examination pursuant to 37 CFR 1.114**

Applicants submit a Request for Continued Examination (RCE) in the instant application pursuant to 37 CFR 1.114 and request that the Examiner allow claims 1, 2, 4, 5-9, 12, 14-16, 18-25 and pass the application to issue. In addition, an extension of time and payment for extra claims are submitted. Please charge the fee of \$790 for the RCE and the fee of \$440.00 for five additional independent claims to our deposit account No. 50-1561, and reference Attorney Docket No. 29633.042600. If there are any additional fees due, please charge any such fees to our deposit account No. 50-1561 and reference the Attorney Docket number listed above. If there is any point requiring further attention prior to allowance, the Examiner is asked to contact Applicants' counsel who can be reached at the telephone number listed below.

Respectfully,

By Claude R. Narcisse  
Claude R. Narcisse  
Reg. No. 38979  
(201) 801-3190

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